

SEQUENCE LISTING

<110> Lawrence, Papsidero  
Lyn, Dyster  
Jana, Frustaci  
  
<120> Detection and Treatment of Breast Cancer  
  
<130> 3380/II127-US4  
  
<140> TBA  
<141> Concurrently Herewith  
  
<150> 09/146,580  
<151> 1998-09-03  
  
<150> 60/071,899  
<151> 1998-01-20  
  
<150> 60/092,155  
<151> 1998-07-09  
  
<160> 35  
  
<170> PatentIn version 3.0  
:  
<210> 1  
<211> 127  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> UNSURE  
<222> (70)...(70)  
<223> Xaa at position 70 is either Arg or Gly  
  
<220>  
<221> UNSURE  
<222> (91)...(91)  
<223> Xaa at position 70 is either Lys or Asn

<400> 1

Met Gln Gln Arg Gly Leu Ala Ile Val Ala Leu Ala Val Cys Ala Ala  
1 5 10 15

Leu His Ala Ser Glu Ala Ile Leu Pro Ile Ala Ser Ser Cys Cys Thr  
20 25 30

Glu Val Ser His His Ile Ser Arg Arg Leu Leu Glu Arg Val Asn Met  
35 40 45

Cys Arg Ile Gln Arg Ala Asp Gly Asp Cys Asp Leu Ala Ala Val Ile  
50 55 60

Leu His Val Lys Arg Xaa Arg Ile Cys Val Ser Pro His Asn His Thr  
65 70 75 80

Val Lys Gln Trp Met Lys Val Gln Ala Ala Xaa Lys Asn Gly Lys Gly  
85 90 95

Asn Val Cys His Arg Lys Lys His His Gly Lys Arg Asn Ser Asn Arg  
100 105 110

Ala His Gln Gly Lys His Glu Thr Tyr Gly His Lys Thr Pro Tyr  
115 120 125

<210> 2  
<211> 104  
<212> PRT  
<213> Homo sapiens

<220>  
<221> UNSURE  
<222> (47)...(47)  
<223> Xaa at position 47 is either Arg or Gly

<220>  
<221> UNSURE  
<222> (68)...(68)  
<223> Xaa at position 47 is either Lys or Asn

<400> 2

Leu Pro Ile Ala Ser Ser Cys Cys Thr Glu Val Ser His His Ile Ser  
1 5 10 15

Arg Arg Leu Leu Glu Arg Val Asn Met Cys Arg Ile Gln Arg Ala Asp  
20 25 30

Gly Asp Cys Asp Leu Ala Ala Val Ile Leu His Val Lys Arg Xaa Arg  
35 40 45

Ile Cys Val Ser Pro His Asn His Thr Val Lys Gln Trp Met Lys Val  
50 55 60

Gln Ala Ala Xaa Lys Asn Gly Lys Gly Asn Val Cys His Arg Lys Lys

65 70 75 80

His His Gly Lys Arg Asn Ser Asn Arg Ala His Gln Gly Lys His Glu  
85 90 95

Thr Tyr Gly His Lys Thr Pro Tyr  
100

<210> 3  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 3

Thr Glu Val Ser His His Ile Ser Arg Arg Leu Leu Glu Arg Val Asn  
1 5 10 15

Met Cys

<210> 4  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 4

Lys Asn Gly Lys Gly Asn Val Cys His Arg Lys Lys His His Gly Lys  
1 5 10 15

<210> 5  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 5

Asn Ser Asn Arg Ala His Gln Gly Lys His Glu Thr Tyr Gly His Lys  
1 5 10 15

Thr Pro Tyr

<210> 6  
<211> 3117  
<212> DNA  
<213> Homo sapiens

<220>

<221> unsure  
<222> (1)..(3117)  
<223> n at any position in the sequence may represent a or g or c or t/

<400> 6  
aacatcctca ctgtgttgc tgtcagtgcc tgtanggcag gcaggaatgc agcagagagg 60  
actcgccatc gtggccttgg ctgtctgtgc gccctacat gcctcagaag ccatacttcc 120  
cattgcctcc agctgttgca cgaggtttc acatcatatt tccagaaggc tcctggaaag 180  
agtgaatatg tgtcgcatcc agagagctga tggggattgt gacttggctg ctgtcatcct 240  
tcatgtcaag cgcnagaagaa tctgtgtcag cccgcacaac catactgtta agcagtggat 300  
gaaagtgcaa gctgccaana aaaatggtaa agaaaatgtt tgccacagga agaaacacca 360  
tggcaagagg aacagtaaca gggcacatca gggaaacac gaaacatacg gccataaaac 420  
tccttatttag agaatctaca gataaatcta cagagacaat ccccaagtg gacttggcca 480  
tgattggttg taagtttac atctgaattc tccttattgt agacaacaga aaaaaacaaa 540  
atattggttt ttaaaaaatg aacaatttg ccgtatgcaa atgtacccaa taatatactc 600  
cactggaaaa tgaatgaaa aaannatact ggctggtat ggtgggtccc ccctttatc 660  
ccannnnctt cgggaggcag aggcaggagg atcacttgag accaggant ngagacnagc 720  
tnggggcaaa anagcaanga cntcattnt acaaacnaaa aaaaanntg gcccggcntg 780  
gtagnacttg cntataatcc cagcnacatg ggaggtngag gtgggaggat cacttgagtc 840  
tggngagtt ngaggtngca gtgagcagcn tgggtgacag aatgnagacc ntgtctctaa 900  
aaataataat aataatgata gtgtatatct tcataataata tttaagnag gagcatata 960  
atataacttn ctcccaactt tttaattata gtttccaaa cttacagaga agttaaaaga 1020  
atggtacaat gaacatctat atatcttca ccacaatatt aatcattgtt aatattgtgc 1080  
cacatttgct ttctctctcc tctcttgta ggggttncaa tataaaatata tataacttt 1140  
aaaatatatac ttgtttgct aaccattgga aaataagttg caaaaatcat gacacttcac 1200  
ccctagttc tttnnggtgt tataacttga cataccctaa aataaagaca tttttctaca 1260  
taatcacctt atcagttta tacctaaaaa attaataatt tcatctaata tattccatat 1320

tcaaatttc ccaactattt agagagcatt ttatgttagtt ttttttcac tccagtaatc 1380  
aatcaaggtn gacatacata ttgcaaataa ttgttatttt tccttaatat cttaatct 1440  
aagaaagtgc ctctgtctt ttttttaat tttaaaattt atttgttga gggagggct 1500  
tgctgtgtct tccaggctgg agtgcagtgg cacaatttg atttggctc actgaagcct 1560  
caactttagg gctcaagcaa tcctcccacc tcagcctncc cgagtatctg ggatcaaggt 1620  
gcataccac cacacctggc taattttgtt tatttttgtt agagacaggg tctcactatg 1680  
ttgcccaggt tgatctcaa ctcctggct caagcgatcc tcccacctta gcctcccaa 1740  
gtactggat tataggtgtg agccacagtg cctggctaa ttatTTCTT gtgatcaa 1800  
tcaggttaa tgTTTTGgt taagaatttc ctacgtgaat tcgtgtactt atttgtcat 1860  
tttagagttca taaatattag ggTTTATTTC ctaaatagaa tagttaaac taaatataac 1920  
ttcaaaacgt ctagtttag tagtaccgt tgTTTGGATT gaaattttct gatactgaaa 1980  
agaacaaaaa gcctgcctt ctgcccanaa csnntgcyt cccccagtna gttctggng 2040  
cagactagt taggnccca gagttngcc ttngkgtgg tgatTTTang ytctgcctaa 2100  
acaaggngcn wacatyttt agtcctatt ccaccytc namamgttt tgTTGKGTT 2160  
tttttttttt tttkgagaca grrtntnayt ctgtttgcc argctggart tgcaGTTGGCA 2220  
caatytnnggy tncattgcaa cytcngcytc csgccgttc aaktgatyyt cttgcycat 2280  
cytccccaaag taantgatat tacaggnGCC cagccaccam accccgntga wttttgtatt 2340  
tttarar amrgggTTT cccgcNTTGG cnGGGCTGGT ctcnaANTCC ttgamCTCNA 2400  
ktgaaccacc cgcctgtgcc ycccaaantg ctgaaattac cancgttgan ccaccatgcc 2460  
gggcycacac gttgarttt ganaccattg tnccattcct ctTTTGGCCT ytttttntc 2520  
catagnngct tcaagataga tangtaagrg cccagtagtn gttcwtarga agcnmatagr 2580  
rancrggarc canttnatc aggtggcag gtgtccnnngg cytccctgct ggytnntccc 2640  
aagcggtgg gttgccarga nktnttggar gtgataatgg gananaccag naggcmctga 2700  
gtyncnnatg gttnaaatgc caccaaaact ggccttggc ctaatatccy ycNTTGAmta 2760  
nttarCATTT awtttattwa ttTNCCTGAC attntgcma ncctttgtwt ttntatttcc 2820

nctntatara wgargaaatt tgaggntytt araggtaaaa tgantgcnc nrgtnnacmc 2880  
aggaagtggc nraranaanc ttttanatn mgaaaaaatt aataaaatat aatatgagag 2940  
taacttaaaa tattaataaa ccacaattt aaattaatta accgtgataa ccaacattaa 3000  
taaaagttaa gataccaaaa cactggtgtn taatttttn aactaacaan ttgaattatt 3060  
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<210> 7  
<211> 381  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (207)..(207)  
<223> n may represent a or g or c or t/u

<220>  
<221> unsure  
<222> (272)..(272)  
<223> n may represent a or g or c or t/u

<400> 7  
atgcagcaga gaggactcgcatcgtggcc ttggctgtct gtgcggccct acatgcctca 60  
gtagccatac ttcccattgc ctccagctgt tgcacggagg tttcacatca tatttccaga 120  
aggctctgg aaagagtgaa tatgtgtcgc atccagagag ctgatgggaa ttgtgacttg 180  
gctgctgtca tccttcatgt caagcgcnga agaatctgtg tcagcccgca caaccatact 240  
gttaagcagt ggatgaaagt gcaagctgcc aaaaaaatg gttaaggaaa tgttgccac 300  
aggaagaaac accatggcaa gaggaacagt aacagggcac atcagggaa acacgaaaca 360  
tacggccata aaactcctta t 381

<210> 8  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 8

acacgaattc acgttagaaaa ttcttaacca aaaacattaa acctgaattt gatcacaaga 60  
aaataattag gccaggcact gtggctcaca cctataatcc cagt 104

<210> 9  
<211> 25  
<212> DNA  
<213> Homo sapiens

<400> 9  
gaattcacgt aggaaattct taacc 25

<210> 10  
<211> 22  
<212> DNA  
<213> Homo sapiens

<400> 10  
actgggattta taggtgtgag cc 22

<210> 11  
<211> 311  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (101)..(101)  
<223> n may be a or g or c or t/u

<220>  
<221> unsure  
<222> (162)..(162)  
<223> n may be a or g or c or t/u

<400> 11  
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ggtgtttctt cctgtggcaa acatttcctt taccatttt ntggcagct tgcactttca 120  
tccactgctt aacagtatgg ttgtgcgggc tgacacagat tnttctgcgc ttgacatgaa 180  
ggatgacagc agccaagtca caatccccat cagctctctg gatgcgacac atattcactc 240  
tttccaggag ccttctggaa atatgatgtg aaacctccgt gcaacagctg gaggcaatgg 300

gaagtatggc t

<210> 12  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Sequencing primer T7

<400> 12  
taatacgact cactataggg

20

<210> 13  
<211> 18  
<212> DNA  
<213> Artificial

<220>  
<223> pCR3.1 Reverse Primer

<400> 13  
tagaaggcac agtcgagg

18

<210> 14  
<211> 22  
<212> DNA  
<213> Artificial

<220>  
<223> Gene specific primer (24R)

<400> 14  
actgggattt taggtgtgag cc

22

<210> 15  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> Gene specific primer (24R2)

<400> 15  
caaattcagg tttaatgttt ttgg

24

<210> 16  
<211> 21  
<212> DNA  
<213> Artificial

<220>  
<223> Gene specific primer (F4 )

<400> 16  
ctcaaacgtg tgagccggc a 21

<210> 17  
<211> 25  
<212> DNA  
<213> Artificial

<220>  
<223> Gene specific primer (F3)

<400> 17  
gttactcaaa ctagacgttt tgaag 25

<210> 18  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> primers F8

<400> 18  
ccgtatgttt cgtgtttccc ctga 24

<210> 19  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> Primer R5

<400> 19  
agccatactt cccattgcct ccag 24

<210> 20  
<211> 150

<212> PRT

<213> Homo sapiens

<400> 20

Met Asn Leu Trp Leu Leu Ala Cys Leu Val Ala Gly Phe Leu Gly Ala  
1 5 10 15

Trp Ala Pro Ala Val His Thr Gln Gly Val Phe Glu Asp Cys Cys Leu  
20 25 30

Ala Tyr His Tyr Pro Ile Gly Trp Ala Val Leu Arg Arg Ala Trp Thr  
35 40 45

Tyr Arg Ile Gln Glu Val Ser Gly Ser Cys Asn Leu Pro Ala Ala Ile  
50 55 60

Phe Tyr Leu Pro Lys Arg His Arg Lys Val Cys Gly Asn Pro Lys Ser  
65 70 75 80

Arg Glu Val Gln Arg Ala Met Lys Leu Leu Asp Ala Arg Asn Lys Val  
85 90 95

Phe Ala Lys Leu His His Asn Met Gln Thr Phe Gln Ala Gly Pro His  
100 105 110

Ala Val Lys Lys Leu Ser Ser Gly Asn Ser Lys Leu Ser Ser Ser Lys  
115 120 125

Phe Ser Asn Pro Ile Ser Ser Lys Arg Asn Val Ser Leu Leu Ile  
130 135 140

Ser Ala Asn Ser Gly Leu  
145 150

<210> 21

<211> 95

<212> PRT

<213> Homo sapiens

<400> 21

Met Cys Cys Thr Lys Ser Leu Leu Leu Ala Ala Leu Met Ser Val Leu  
1 5 10 15

Leu Leu His Leu Cys Gly Glu Ser Glu Ala Ser Asn Phe Asp Cys Cys  
20 25 30

Leu Gly Tyr Thr Asp Arg Ile Leu His Pro Lys Phe Ile Val Gly Phe  
35 40 45

Thr Arg Gln Leu Ala Asn Glu Gly Cys Asp Ile Asn Ala Ile Ile Phe  
50 55 60

His Thr Lys Lys Lys Leu Ser Val Cys Ala Asn Pro Lys Gln Thr Trp  
65 70 75 80

Val Lys Tyr Ile Val Arg Leu Leu Ser Lys Lys Val Lys Asn Met  
85 90 95

<210> 22

<211> 94

<212> PRT

<213> Homo sapiens

<400> 22

Met Ala Pro Leu Lys Met Leu Ala Leu Val Thr Leu Leu Leu Gly Ala  
1 5 10 15

Ser Leu Gln His Ile His Ala Ala Arg Gly Thr Asn Val Gly Arg Glu  
20 25 30

Cys Cys Leu Glu Tyr Phe Lys Gly Ala Ile Pro Leu Arg Lys Leu Lys  
35 40 45

Thr Trp Tyr Gln Thr Ser Glu Asp Cys Ser Arg Asp Ala Ile Val Phe  
50 55 60

Val Thr Val Gln Gly Arg Ala Ile Cys Ser Asp Pro Asn Asn Gln Arg  
65 70 75 80

Val Lys Asn Ala Val Lys Tyr Leu Gln Ser Leu Glu Arg Ser  
85 90

<210> 23

<211> 96

<212> PRT

<213> Homo sapiens

<400> 23

Met Gln Ile Ile Thr Thr Ala Leu Val Cys Leu Leu Leu Ala Gly Met  
1 5 10 15

Trp Pro Glu Asp Val Asp Ser Lys Ser Met Gln Val Pro Phe Ser Arg  
20 25 30

Cys Cys Phe Ser Phe Ala Glu Gln Glu Ile Pro Leu Arg Ala Ile Leu  
35 40 45

Cys Tyr Arg Asn Thr Ser Ser Ile Cys Ser Asn Glu Gly Leu Ile Phe  
50 55 60

Lys Leu Lys Arg Gly Lys Glu Ala Cys Ala Leu Asp Thr Val Gly Trp  
65 70 75 80

Val Gln Arg His Arg Lys Met Leu Arg His Cys Pro Ser Lys Arg Lys  
85 90 95

<210> 24

<211> 77

<212> PRT

<213> Homo sapiens

<400> 24

Ala Gln Pro Asp Ser Val Ser Ile Pro Ile Thr Cys Cys Phe Asn Val  
1 5 10 15

Ile Asn Arg Lys Ile Pro Ile Gln Arg Leu Glu Ser Tyr Thr Arg Ile  
20 25 30

Thr Asn Ile Gln Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Lys Arg  
35 40 45

Gly Lys Glu Val Cys Ala Asp Pro Lys Glu Arg Trp Val Arg Asp Ser  
50 55 60

Met Lys His Leu Asp Gln Ile Phe Gln Asn Leu Lys Pro  
65 70 75

<210> 25

<211> 98

<212> PRT

<213> Homo sapiens

<400> 25

Met Lys Val Ser Ala Val Leu Leu Cys Leu Leu Leu Met Thr Ala Ala  
1 5 10 15

Phe Asn Pro Gln Gly Leu Ala Gln Pro Asp Ala Leu Asn Val Pro Ser  
20 25 30

Thr Cys Cys Phe Thr Phe Ser Ser Lys Lys Ile Ser Leu Gln Arg Leu  
35 40 45

Lys Ser Tyr Val Ile Thr Thr Ser Arg Cys Pro Gln Lys Ala Val Ile  
50 55 60

Phe Arg Thr Lys Leu Gly Lys Glu Ile Cys Ala Asp Pro Lys Glu Lys  
65 70 75 80

Trp Val Gln Asn Tyr Met Lys His Leu Gly Arg Lys Ala His Thr Leu  
85 90 95

Lys Thr

<210> 26

<211> 97

<212> PRT

<213> Homo sapiens

<400> 26

Met Lys Val Ser Ala Ala Leu Leu Trp Leu Leu Leu Ile Ala Ala Ala  
1 5 10 15

Phe Ser Pro Gln Gly Leu Ala Gly Pro Ala Ser Val Pro Thr Thr Cys  
20 25 30

Cys Phe Asn Leu Ala Asn Arg Lys Ile Pro Leu Gln Arg Leu Glu Ser  
35 40 45

Tyr Arg Arg Ile Thr Ser Gly Lys Cys Pro Gln Lys Ala Val Ile Phe  
50 55 60

Lys Thr Lys Leu Ala Lys Asp Ile Cys Ala Asp Pro Lys Lys Lys Trp  
65 70 75 80

Val Gln Asp Ser Met Lys Tyr Leu Asp Gln Lys Ser Pro Thr Pro Lys  
85 90 95

Pro

<210> 27

<211> 99

<212> PRT

<213> Homo sapiens

<400> 27

Met Lys Ala Ser Ala Ala Leu Leu Cys Leu Leu Leu Thr Ala Ala Ala  
1 5 10 15

Phe Ser Pro Gln Gly Leu Ala Gln Pro Val Gly Ile Asn Thr Ser Thr  
20 25 30

Thr Cys Cys Tyr Arg Phe Ile Asn Lys Lys Ile Pro Lys Gln Arg Leu  
35 40 45

Glu Ser Tyr Arg Arg Thr Thr Ser Ser His Cys Pro Arg Glu Ala Val  
50 55 60

Ile Phe Lys Thr Lys Leu Asp Lys Glu Asp Cys Ala Asp Pro Thr Gln  
65 70 75 80

Lys Trp Val Gln Asp Pro Met Lys His Leu Asp Lys Lys Thr Gln Thr  
85 90 95

Pro Lys Leu

<210> 28

<211> 99

<212> PRT

<213> Homo sapiens

<400> 28

Met Lys Val Ser Ala Ala Leu Leu Cys Leu Leu Leu Thr Ala Ala Ala  
1 5 10 15

Phe Ile Pro Gln Gly Leu Ala Gln Pro Asp Ala Ile Asn Ala Pro Val  
20 25 30

Thr Cys Cys Tyr Asn Phe Thr Asn Arg Lys Ile Ser Val Gln Arg Leu  
35 40 45

Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys Cys Pro Lys Glu Ala Val  
50 55 60

Ile Phe Lys Thr Ile Val Ala Lys Glu Asp Cys Ala Asp Pro Lys Gln  
65 70 75 80

Lys Trp Val Gln Asp Ser Met Asp His Leu Asp Lys Gln Thr Gln Thr  
85 90 95

Pro Lys Thr

<210> 29

<211> 91

<212> PRT

<213> Homo sapiens

<400> 29

Met Lys Val Ser Ala Ala Arg Leu Ala Val Ile Leu Ile Ala Thr Ala  
1 5 10 15

Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro  
20 25 30

Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys  
35 40 45

Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe  
50 55 60

Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp  
65 70 75 80

Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser  
85 90

<210> 30  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 30

Met Lys Ile Ser Val Ala Ala Ile Pro Phe Phe Leu Leu Ile Thr Ile  
1 5 10 15

Ala Leu Gly Thr Lys Thr Glu Ser Ser Ser Arg Gly Pro Tyr His Pro  
20 25 30

Ser Glu Cys Cys Phe Thr Tyr Thr Thr Tyr Lys Ile Pro Arg Gln Arg  
35 40 45

Ile Met Asp Tyr Tyr Glu Thr Asn Ser Gln Cys Ser Lys Pro Gly Ile  
50 55 60

Val Phe Ile Thr Lys Arg Gly His Ser Val Cys Thr Asn Pro Ser Asp  
65 70 75 80

Lys Trp Val Gln Asp Tyr Ile Lys Asp Met Lys Glu Asn  
85 90

<210> 31  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 31

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala  
1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr  
20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val  
35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val  
50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser  
65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn  
85 90

<210> 32  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 32

Met Gln Val Ser Thr Ala Ala Leu Ala Val Leu Leu Cys Thr Met Ala  
1 5 10 15

Leu Cys Asn Gln Val Leu Ser Ala Pro Leu Ala Ala Asp Thr Pro Thr  
20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ser Arg Gln Ile Pro Gln Asn Phe Ile  
35 40 45

Ala Asp Tyr Phe Glu Thr Ser Ser Gln Cys Ser Lys Pro Ser Val Ile  
50 55 60

Phe Leu Thr Lys Arg Gly Arg Gln Val Cys Ala Asp Pro Ser Glu Glu  
65 70 75 80

Trp Val Gln Lys Tyr Val Ser Asp Leu Glu Leu Ser Ala  
85 90

<210> 33  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 33

Met Gln Val Ser Thr Ala Ala Leu Ala Val Leu Leu Cys Thr Met Ala  
1 5 10 15

Leu Cys Asn Gln Phe Ser Ala Ser Leu Ala Ala Asp Thr Pro Thr Ala  
20 25 30

Cys Cys Phe Ser Tyr Thr Ser Arg Gln Ile Pro Gln Asn Phe Ile Ala  
35 40 45

Asp Tyr Phe Glu Thr Ser Ser Gln Cys Ser Lys Pro Gly Val Ile Phe  
50 55 60

Leu Thr Lys Arg Ser Arg Gln Val Cys Ala Asp Pro Ser Glu Glu Trp  
65 70 75 80

Val Gln Lys Tyr Val Ser Asp Leu Glu Leu Ser Ala  
85 90

<210> 34  
<211> 89  
<212> PRT  
<213> Homo sapiens

<400> 34

Met Lys Gly Leu Ala Ala Ala Leu Leu Val Leu Val Cys Thr Met Ala  
1 5 10 15

Leu Cys Ser Cys Ala Gln Val Gly Thr Asn Lys Glu Leu Cys Cys Leu  
20 25 30

Val Tyr Thr Ser Trp Gln Ile Pro Gln Lys Phe Ile Val Asp Tyr Ser  
35 40 45

Glu Thr Ser Pro Gln Cys Pro Lys Pro Gly Val Ile Leu Leu Thr Lys  
50 55 60

Arg Gly Arg Gln Asp Cys Ala Asp Pro Asn Lys Lys Trp Val Gln Lys  
65 70 75 80

Tyr Ile Ser Asp Leu Lys Leu Asn Ala  
85

<210> 35  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 35  
acacgaattc acgttagaaaa ttcttaacca aaaacattaa acctgaattt gatcacaaga 60

aaataattag gccaggcact gtggctcaca cctataatcc cagt

104